

Dispensing Peristaltic Pump



Features

- Suitable for large flow rate, high efficiency, high precision filling.
- Servo motor drive, accurate control, strong driving force.
- 304 stainless steel drive housing can support the filling line.
- New flow rate mode, can be used for continuous transferring.

Model Number

- F6-3L/DZ25-3L
- F6-6L/DZ25-6L
- F6-12L/YZ35

Technical Specifications

Flow rate range	F6-3L: 2.11~3600 mL/min F6-6L: 3.0~6000 mL/min F6-12L: 0.0069~12 L/min	Control method	Touch screen and Mechanical keypad
Speed range	1-600 rpm	Keypad lifetime	300,000 times
Speed resolution	0.01 rpm	Start/stop, direction signal	Passive switch signal, such as foot pedal switch Active switch signal: 5V, 12V and 24V for option
Dispensing volume range	0.1-9999.99 mL	Output interface	Output motor working status (Open-Collector output)
Dispensing volume resolution	0.01 mL	Communication interface	RS232, RS485 support Modbus protocol (RTU mode)
Dispensing time	0.1-9999.99 s	Power supply	AC 220V±10% 50Hz/60Hz (Standard) AC 110V±10% 50Hz/60Hz (Optional)
Pause time	0.1-9999.99 s	Drive dimension	F6-3L: 223×152×200mm F6-6L: 283×192×218mm F6-12L: 302×222×275mm
Time resolution	0.01 s	Drive weight	F6-3L: 5.02kg; F6-6L: 7.85kg; F6-12L: 13.14kg;
Copy numbers	1-9999 times, setting '0' means unlimited	Power consumption	F6-3L: < 80W ; F6-6L: < 180W ; F6-12L: < 300W
Back suction angle	0-360°	Condition temperature	0-40°C
Outlet pressure	0.3 Mpa	Relative humidity	< 80%
Dispensing accuracy	<±0.5%	IP rate	IP31
Motor type	Servo motor		
Display	Industrial grade 4.3" color LCD display		

Product Composition and Flow Rate Range

Drive	Motor Type	Pump Head	Tubing Size	Speed Range(rpm)	Flow Rate(mL/min)
F6-3L	Servo Motor	DZ25-3L	15#, 24#, 35#, 36#	1-600	2.11~3600
F6-6L		DZ25-6L	15#, 24#, 35#, 36#		3.0~6000
F6-12L		YZ35	26#, 73#, 82#		6.9~12000



LabF6/F6 Filling Volume Reference Parameter(Media is water)							
Drive	Pump Head	Tubing	Filling Volume (mL)	Filling Time(s)	Filling Accuracy (±%)	Output(pcs/min)	Motor Speed(rpm)
LabF6/F6	YZ1515x YZ2515x	13#	0.1	0.5	±5ul	40	204.083
		13#	0.3	0.7	1.5	35	426.251
		13#	0.5	1	0.8	30	516.081
		13#	1	2	0.5	20	517.152
		14#	2	1	1	30	446.724
		14#	3	1.5	0.8	24	446.479
		19#	5	1.2	1	27	454.919
		16#	7	1	0.5	30	457.705
		25#/15#	10	1	1	30	303.426
		25#/15#	15	1	0.8	30	461.273
		25#/15#	20	1.2	0.5	27	518.945
		17#/24#	30	1.2	0.8	27	462.725
		17#/24#	50	2	0.5	20	461.595
		18#	80	2.5	0.5	17	427.274
		18#	100	3	0.5	15	446.583
F6-3L	DZ25-3L	15#	16	1	0.5	30	443.540
		24#	30	1.2	1.0	27	454.877
		35#	150	4	0.6	12	447.940
		36#	200	4	0.6	12	481.802
F6-6L	DZ25-6L	15#	80	4	0.4	12	396.800
		24#	150	4	0.4	12	440.700
		35#	200	3.2	0.5	14	439.540
		36#	300	3.5	0.5	13	473.208
F6-12L	YZ35	26#	150	3	0.5	15	423.254
		73#	300	3	0.5	15	457.805
		82#	500	3	0.5	15	458.451

F6 Series Filling Accuracy Reference Parameter(Media is water)																
Drive	Pump Head	Tubing	Filling Volume	Filling Time	Actual Filling Volume(mL)										Filling Accuracy	
F6-3L	DZ25-3L	15*	16mL	1s	15.97	15.97	16.00	16.06	15.97	15.92	15.96	16.02	16.01	15.97	-0.50%	0.50%
					15.98	16.00	16.04	16.08	15.92	15.95	16.01	16.01	15.97	15.97		
		24*	30mL	1.2s	29.98	30.12	30.20	30.29	30.06	29.94	30.11	30.18	30.02	29.99	-0.20%	1.00%
					30.23	30.24	30.12	29.99	30.12	30.23	30.20	30.30	30.19	30.11		
		35*	150mL	4s	149.50	149.50	150.10	150.00	149.80	149.00	149.70	149.50	150.10	149.60	-0.15%	0.60%
					149.00	149.90	149.70	149.10	149.50	150.00	150.10	150.10	149.60	149.40		
		36*	200mL	4s	199.70	200.30	200.10	200.30	200.00	200.00	200.70	200.80	200.70	200.40	-0.67%	0.07%
					200.30	200.00	200.30	200.80	200.90	200.70	200.80	200.40	200.50	200.20		
F6-6L	DZ25-6L	15*	80mL	4s	80.2	80.0	80.3	80.2	80.1	80.1	80.2	80.1	80.2	80.1	-0.125%	0.375%
					80.1	79.9	80.1	79.9	80.0	80.1	19.9	80.1	80.1	80.0		
		24*	150mL	4s	149.9	150.2	150.0	150.1	150.0	150.3	150.0	150.1	150.3	150.0	-0.067%	0.200%
					149.9	150.1	150.0	150.0	150.1	150.0	150.1	149.9	150.2	150.2		
		35*	200mL	3.5s	199.7	199.9	200.2	200.2	200.2	199.6	199.8	199.8	200.1	199.9	-0.400%	0.100%
					199.5	199.2	199.5	199.9	199.5	199.3	199.8	199.3	199.6	199.9		
		36*	300mL	3.5s	300.4	300.1	300.3	300.3	300.4	300.1	300.3	300.4	300.6	300.2	-0.167%	0.200%
					300.2	300.0	300.1	300.2	300.2	299.9	299.5	300.5	300.5	300.6		
F6-12L	YZ35	26*	150mL	3s	149.3	150.3	149.6	150.2	150.5	150.1	150.5	150.1	150.5	150.0	-0.47%	0.33%
					150.4	149.9	150.4	150.0	150.3	149.8	150.3	149.9	150.4	150.0		
		73*	300mL	3s	299.9	299.8	300.0	300.1	300.4	300.2	300.4	300.4	300.6	300.5	-0.07%	0.27%
					300.8	300.6	300.5	300.5	300.5	300.6	300.7	300.5	300.6	300.6		
		82*	500mL	3s	500.0	497.8	499.7	498.3	498.4	499.5	498.2	499.7	499.2	498.4	-0.44%	0.38%
					499.5	498.3	501.5	501.9	500.0	501.8	501.1	500.5	501.6	499.6		

Easy Load Pump Head

YZ35-PPS, YZ35(Aluminum Alloy)



Model Number

| YZ35-PPS, YZ35(Aluminum Alloy)

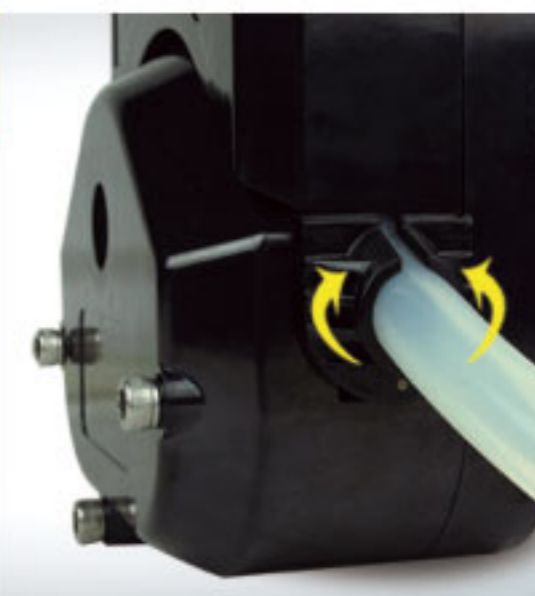


Product Introduction

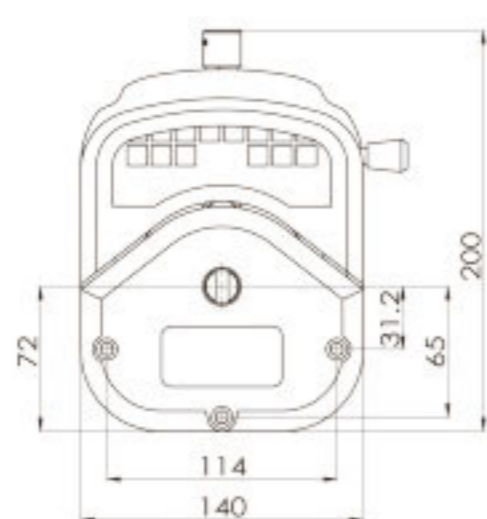
YZ35 pump head with aluminum alloy or PPS housing material. 304 stainless steel rollers assembly achieve high precision transferring liquid. Adaptive tubing cartridge structure makes it more easy to load the tubing.

YZ35 Pump Head Tubing Holder Advantages

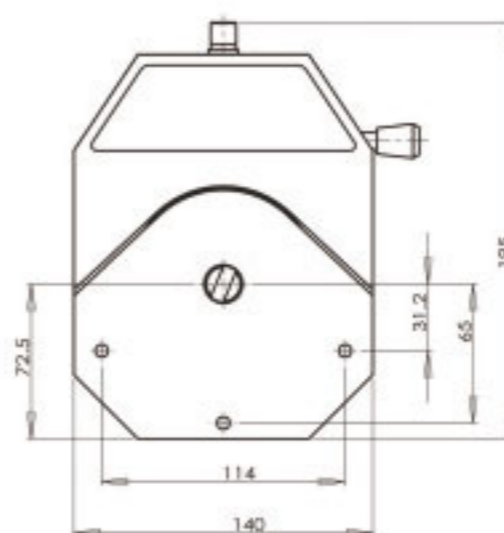
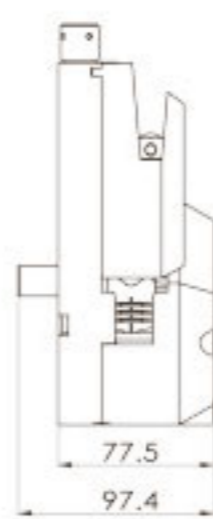
- 01/ Fix the tubing; lower the tubing shaking during working; **improve the stability and accuracy of flow rate.**
- 02/ Prevent the tubing wear, **extend the tubing lifetime.**



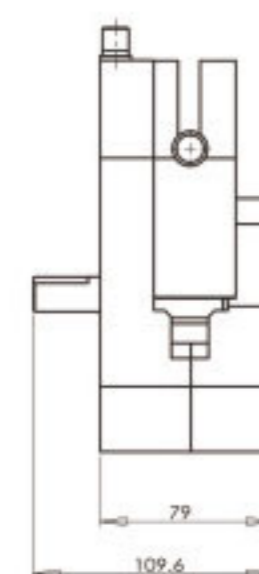
Dimension Drawing (Unit: mm)



YZ35-PPS



YZ35-Aluminum Alloy



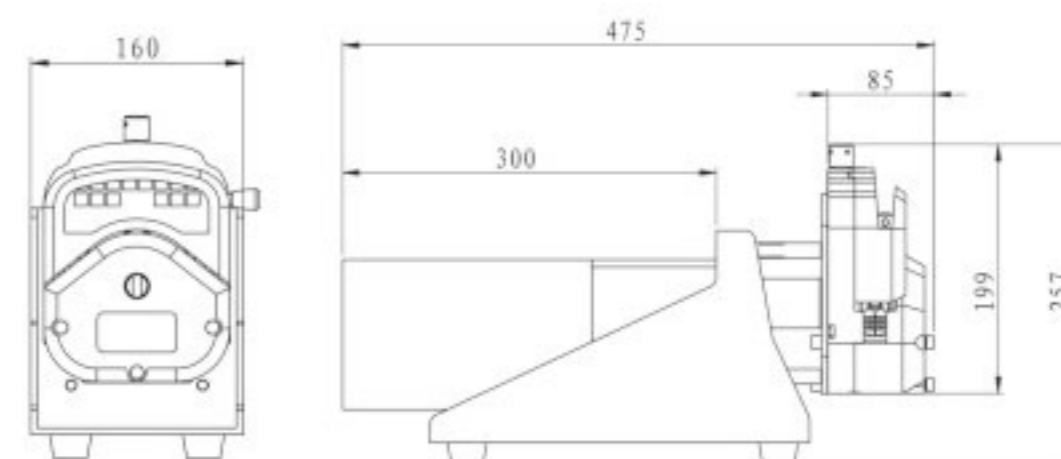
OEM-J24 Series/YZ35



Product Introduction

OEM-J24 use AC gear motor drive, YZ35 pump head is very easy to install tubing. Suitable for laboratory sampling, filling, ultrafiltration, big flow rate pumping and cement additives. It can be used separately, also can combine with other equipment.

Dimension Drawing (Unit: mm)



Technical Specifications

Pump Head	Tubing	ID×Wall Thickness(mm)	mL / r	Flow Rate(mL/min) (0-600rpm)	Power Supply	Motor Type	Material/Weight(kg)	
							Aluminum Alloy	PPS
YZ35	26#	6.4×3.3	6.9	<4200	Three phase 220V/380V for option	AC motor with fixed speed or adjustable speed	4.36	1.50
	73#	9.6×3.3	12.3	<7400				
	82#	12.7×3.3	20	<12000				

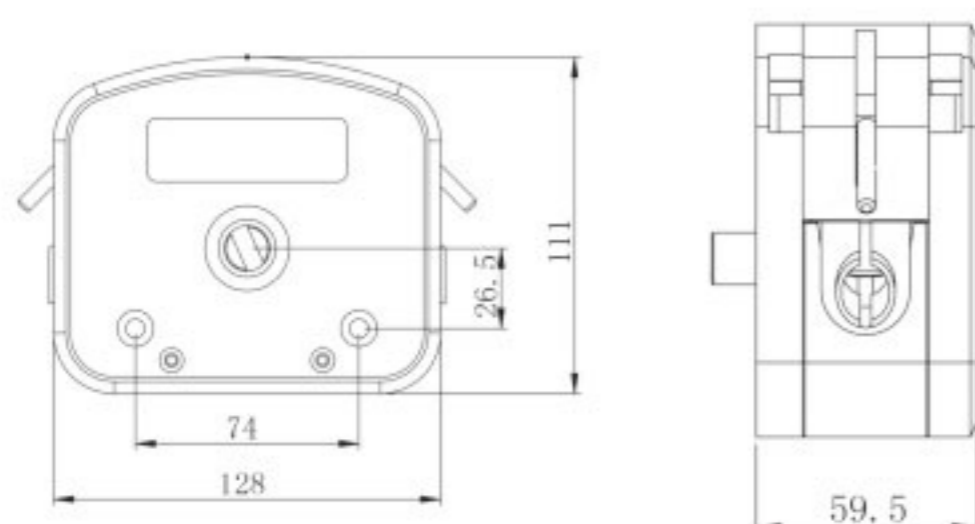


Fast Load Pump Head

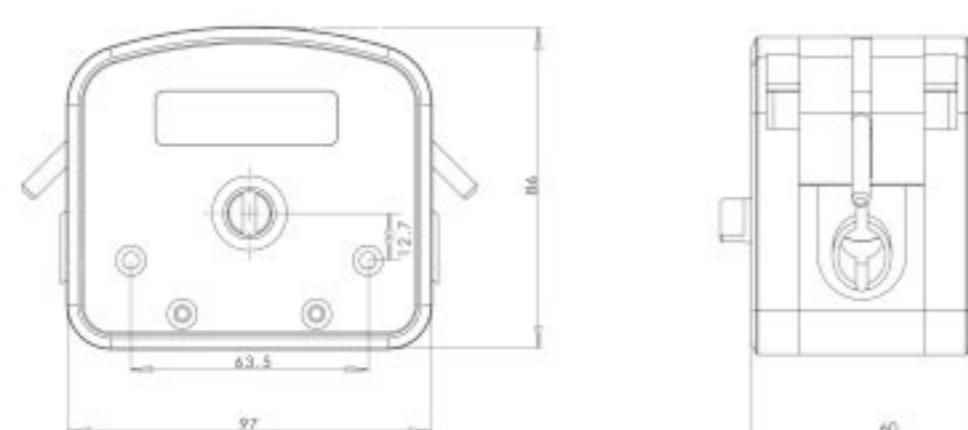
DZ25-3L, DZ25-6L



Dimension Drawing (Unit: mm)



DZ25-6L Dimension



DZ25-3L Dimension

Product Introduction

Easy operation, change tube rapidly. The house material is PPS (polyphenylene sulfite). 304 stainless steel rollers. DZ25 pump head use 2.4mm wall thickness tube, the flow rate range is 0.2-6000mL/min. This pump head is suitable for high viscous liquid which include granule and floc. It also suitable for high pressure request. New cartridge structure design, can use the special connector, connect low cost tubing outside the pump head to save cost; also can use flexible tube card, meet hygiene requirement.

Model Number

DZ25-3L, DZ25-6L (Aluminum Alloy)

Tubing Installation Procedure

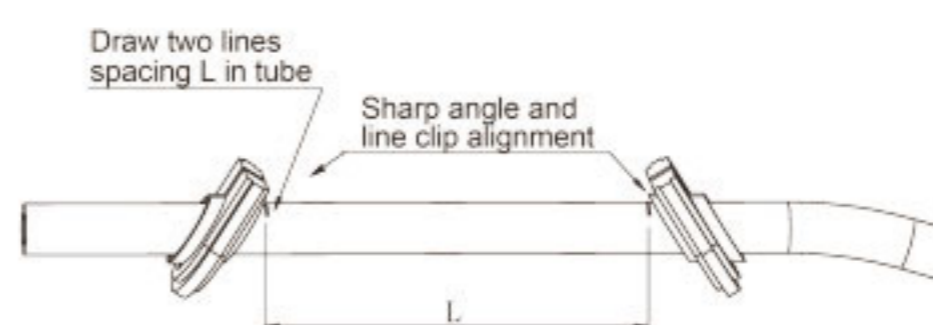
1. Lift both side levers, take off the upper block.



2. Put the tubing with cartridge or connector into pump housing.



3. Install the upper block, put down the levers to lock the block.



Tubing Clamp

DZ25-6L: the tubing length is 125mm between both tubing clamps.
DZ25-3L: the tubing length is 90mm between both tubing clamps.

Technical Specifications

Model No.	Housing Material	Tubing Clamp Material	Tubing		Flow Rate (mL/min) (0.1~600rpm)	Weight (kg)
			Tubing Sizes	ID x Wall Thickness		
DZ25-6L	Aluminum alloy/PPS	PP	15#	4.8 x 2.4 (mm)	0.3~1800	1.86/0.86
			24#	6.4 x 2.4 (mm)	0.55~3300	
			35#	7.9 x 2.4 (mm)	0.8~4800	
			36#	9.6 x 2.4 (mm)	1~6000	
DZ25-3L	PPS/PSF	PP	15#	4.8 x 2.4 (mm)	0.211~1264	0.5
			24#	6.4 x 2.4 (mm)	0.385~2310	
			35#	7.9 x 2.4 (mm)	0.508~3050	
			36#	9.6 x 2.4 (mm)	0.6~3600	

Peristaltic Pump Accessories

A Filling nozzle



When transferring or dispensing liquid reduce splashing and dropping off maximumly, most out of the splash reduction.

Dimensional tolerance $\pm 0.05\%$, assure reproducibility.

Name	Material	Tube
Filling nozzle	304/316 SS	13#/14#, 19#, 16#, 25#/15#, 17#/24#/26#, 18#/35#, 36#/73#, 82#

B One way checkvalve



Avoid liquid drop off after filling and transferring.

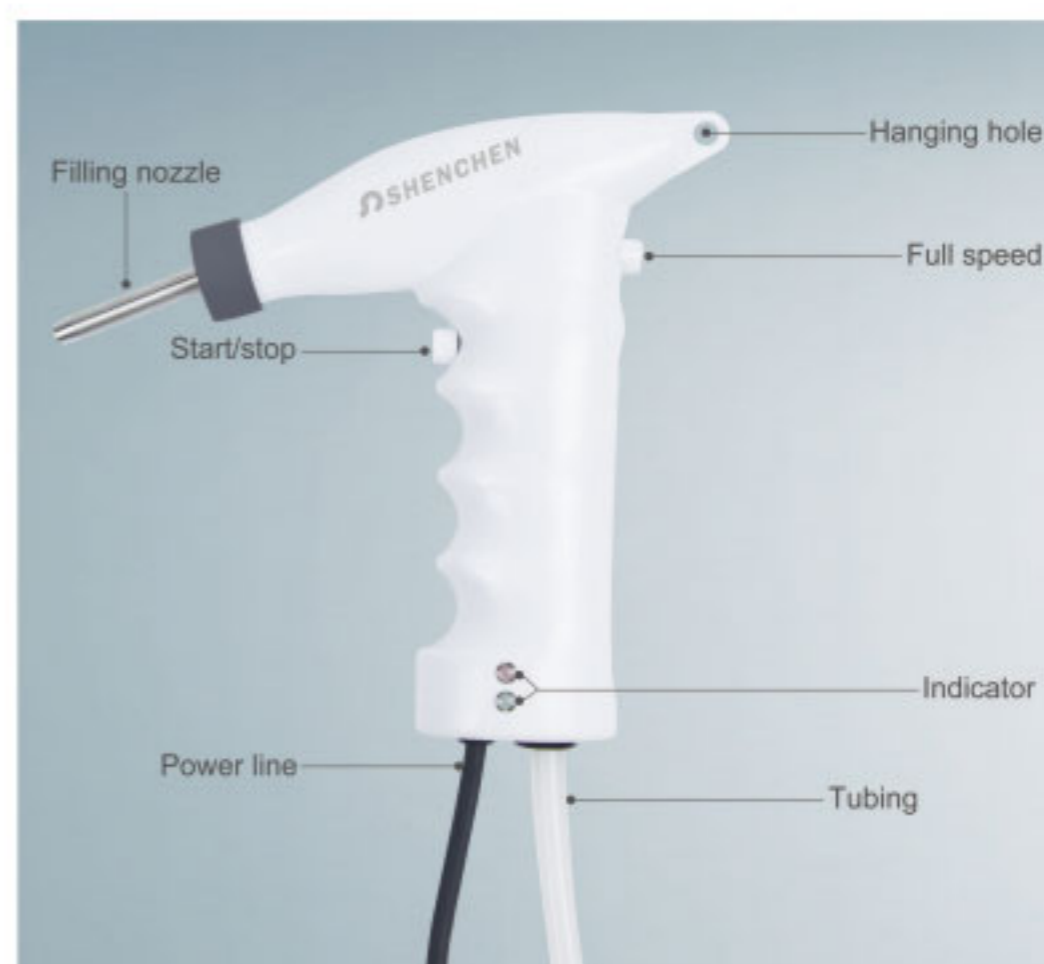
C Filling Countersunk



Used for the output of tube, preventing the tube floating or absorbing the wall of container.

Name	Material	Tube
Counter sunk	304/316 stainless steel	13#, 14#, 19#, 16#, 25#, 17#, 18#, 15#, 24#, 35#, 36#, 26#, 73#, 82#

D Handling Dispenser



Filling nozzle and tubing cap			
Filling nozzle size	13#	14#	19#
Inner diameter	3mm	3.5mm	4.5mm
Picture			
Filling nozzle size	16#	15#/25#	17#/24#
Inner diameter	5mm	7mm	9mm
Picture			
Tubing size	17#	18#	Plum blossom cap
Inner diameter	9.6mm	11.1mm	
Picture			

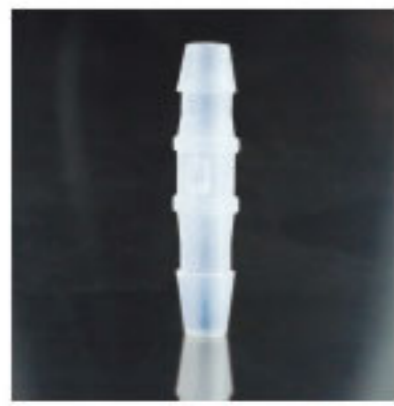
Based on ergonomics design, elegant appearance, grip feeling comfortable, easy operation. Connect to peristaltic pump external control interface, with start/stop and full speed control, can realize transferring and dispensing function. Power supply and working indicator, show the dispenser working status. With hanging hole, can be hang up when do not use.

E Foot pedal switch

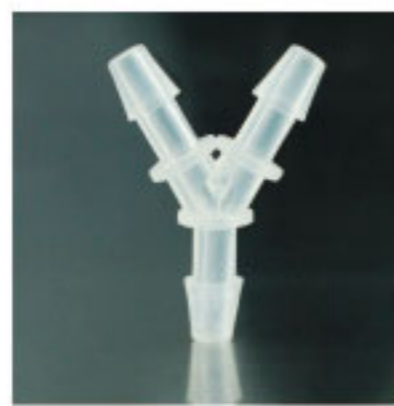


Use the pump without hand, all pumps with 2.0m power line.

F Tube connector



a Straight tube connector



b "Y" tube connector



c Tee tube connector



d Reducer tube connector



e "L" tube connector

Tube				
13"	14"	19"	16"	25"
17"	18"	15"	24"	35"
36"	26"	73"	82"	

G PH Controller



Work with peristaltic pump, can control the liquid PH value, add acid or alkali automatically.

Function:

1. Liquid: Acid-Base Solutions
2. PH value : 0-14PH
3. Set up target PH value
4. Add acid or alkali liquid automaticall
5. Control: RS485 , 4-20mA
6. Power supply: DC24V (AC220V for option)
7. Suitable temperature: 0-60°C

H Wireless remote



When applied in the dispensing line, it can detect whether there is filling bottle in the production line. When the bottle approach the sensor side, the switch action will be made without any mechanical contact or pressure, thereby providing filling control order to the pump. In the same way, when no filling bottle is detected, the stop filling control order is provided to the pump.

I Benchtop tubing cutter



Stainless steel blade, makes right-angle cuts in several sizes of plastic tubing.

J Support stand













The multiple filling stand is suitable for more than 2 channels filling. It can hold 2-8 filling nozzles. We can customize the suitable one according to your request.





















Peristaltic Pump Tubing

Silicone Tubing

- Platinum-Cured Silicone Tubing
- Slightly clarity, smooth surface, low protein binding levels, fewer potential leachable .
- Ideal for pharmaceutical and biotechnology use, suitable temperature range $-51\sim 238\text{ }^{\circ}\text{C}$.

Micro Flow Rate Tubing										
Tubing Size	0.13×0.86	0.5×0.86	0.86×0.86	1.52×0.86	2.06×0.86	2.79×0.86	1×1	2×1	3×1	2.4×0.8
Tubing cross sections (1:1)										
Wall thickness (mm)	0.86						1.0			0.8
Inside diameter (mm)	0.13	0.5	0.86	1.52	2.06	2.79	1.0	2.0	3.0	2.4
Maximum pressure (Mpa)	Continuous									
	Intermittent									

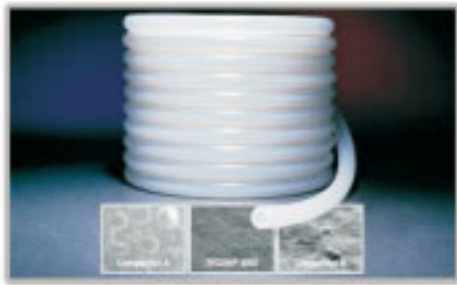




Basic Flow Rate Tubing												
Tubing Size		13 [#]	14 [#]	19 [#]	16 [#]	25 [#]	17 [#]	18 [#]	15 [#]	24 [#]	35 [#]	36 [#]
Tubing cross sections (1:1)												
Wall thickness	mm	1.6							2.4			
	inch	1/16							3/32			
Inside diameter	mm	0.8	1.6	2.4	3.1	4.8	6.4	7.9	4.8	6.4	7.9	9.6
	inch	1/32	1/16	3/32	1/8	3/16	1/4	5/16	3/16	1/4	5/16	3/8
Maximum pressure (Mpa)	Continuous	0.17				0.14	0.1	0.07	0.17		0.14	
	Intermittent	0.27				0.24	0.14	0.1	0.27		0.24	

Industrial Tubing							
Tubing Size	26"	73"	82"	86"	90"	88"	92"
Tubing cross sections (1:1)							
Wall thickness	mm			6.3		4.8	
	inch			1/4		3/16	
Inside diameter	6.4	9.6	12.7	9.5	19	12.7	25.4
	1/4	3/8	1/2	3/8	3/14	1/2	1
Maximum pressure (Mpa)	Continuous				0.25	0.25	
	Intermittent				0.3	0.3	






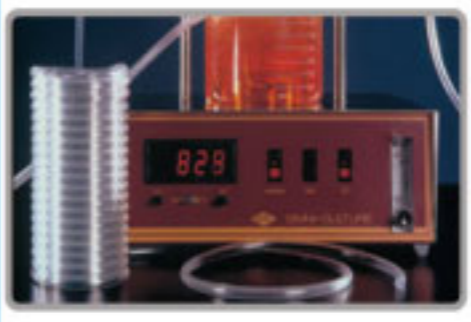

Peristaltic Pump Tubing

SAINT-GOBAIN Tubing: Tygon, PharMed BPT, Norprene etc

	A Tygon3350	B Tygon E-3603	C Norprene Chemical	D PharMed	E Norprene A-60-F
					
Formulation	Tygon3350	Tygon R-3603	Norprene Chemical	PharMed	Norprene A-60-F
Application	Pharmaceutical, cosmetic, medical and auto-analysis application.	General laboratory, food & beverage, biopharmaceutical, analytical instruments.	Excellent for chemical processing and general industrial applications. Food and beverage applications where extractables are a concern.	Cell and tissue culture work and pharmaceutical uses. Also good for light-sensitive samples.	Ideal for the food, dairy and beverage.
Advantages	Ultra-smooth; minimizes bacterial growth. Good for mild to medium concentration bases, salts and alcohols; odorless, tasteless, and nontoxic. Transparent.	Inexpensive tubing for general lab application. Nonaging, nonoxidizing. Clear for easy flow monitoring. Handles virtually all inorganic chemicals. Low gas permeability. Smooth bore; good for viscous fluids. High dielectric constant.	Norprene thermoplastic elastomer outer jacket with chemically inert Tygon® 2075 inner bore for excellent chemical resistance. Plasticizer-free to guard against extractables. Long flex life. Opaque beige.	Great for tissue and cell work-nontoxic and nonhemolytic; long service life minimizes risk of fluid exposure; reduces tubing costs and pump downtime. Opaque to UV and visible light to protect light-sensitive fluids. Heat sealable, bondable, and formable. Extremely low gas permeability.	Heat, ozone, and UV light resistant. Nonaging; nonoxidizing; superior acid and alkali resistance. Opaque beige.
Application Suitability	—————	ACIDS GOOD ALKALIES GOOD ORGANIC SOLVENTS NO PRESSURE GOOD VACUUM GOOD VISCOUS FLUIDS EXCELLENT STERILE FLUIDS GOOD	—————	ACIDS GOOD ALKALIES GOOD ORGANIC SOLVENTS NO PRESSURE GOOD VACUUM EXCELLENT VISCOUS FLUIDS GOOD STERILE FLUIDS EXCELLENT	—————
Physical characteristics	—————	Thermoplastic. PVC-based material with plasticizer. Firm (stiff) material. Transparent, clear.	—————	Thermoplastic elastomer. Polypropylene-based material with USP mineral oil. Excellent tensile strength. Firm (stiff) material. Opaque, beige.	—————
Temp. range	-75 to 450° F (-60~232° C)	-58 to 165° F (-50~74° C)	-76 to 165° F (-60~74° C)	-60 to 270° F (-59~135° C)	-60 to 275° F (-51~135° C)
Meets classifications	FDA 21 CFR 177.2600 USP Class VI EP 3.1.9. Exceeds 3A standards Manufactured according to GMP.	FDA 21 CFR 175.300	None.	None.	FDA 21 CFR 177.2600 NSF listed (Standard 51) Manufactured according to GMP.
Cleaning/ Sterilization	Ethylene oxide gamma irradiation, or autoclave for 30 min, 15psi (1 bar).	Unaffected by commercial sanitizers (with recommended procedures) Sterilize with ethylene oxide (ETO) or autoclave. To autoclave: Coil loosely in nonlinting cloth or paper, autoclave at 121° C (250°F). 1KG/cm ³ (15psi) for 30 minutes (tubing will appear milky); air dry at max 66° C (150°F) for 2 to 2 ½ hours until clear.	Sterilize with ethylene-oxide(ETO), autoclave or gamma irradiation up to 2.5Mrad. Repeated autoclaving will not affect overall life.	Autoclave, ethylene oxide, or gamma irradiation.	Autoclave.



Peristaltic Pump Tubing

	F Norprene A-60-G	G Tygon F-4040-A	H Tygon LFL	I TYGON 2475	K Viton
					
Formulation	Norprene A-60-G	Tygon F-4040-A	Tygon LFL	TYGON 2475	Viton
Application	For applications requiring excellent chemical, heat, ozone, and ultra-violet (UV) light resistance.	Fuels and industrial lubricants-gasoline, kerosene, heating oils, cutting compounds, and glycol-based coolants. Resists most hydrocarbons.	General laboratory use, provides longer life with peristaltic tubing pumps.	Sensitive fluid transfer applications requiring high purity.	Acid and solvent transfer, high-temperature.
Advantages	Best choice for vacuum/pressure applications. Offers longest life with good flow consistency. Heat and ambient ozone resistant. Good resistance to acids/alkalies. Black color hides dirt and dust. Heat sealable, nonaging, and nonoxidizing. High dielectric constant.	Resists embrittlement and swelling, ozone-and UV-resistant, with low-extractability. Translucent yellow.	Longest life of all Tygon® peristaltic tubing (1000hrs). Nonaging, nonoxidizing. Clear for easy flow monitoring. Broad chemical resistance; low gas permeability. Smooth bore. Good for viscous fluids. High dielectric constant.	Plasticizer free, smooth inner surface (inhibits particulate buildup and bacterial growth), safely disposed of through incineration and nontoxic. Transparent.	The most chemical resistant tubing. Registant to corrosives, solvents, and oils at elevated temperatures. Low gas permeability.
Application Suitability	ACIDS GOOD ALKALIES GOOD ORGANIC SOLVENTS NO PRESSURE EXCELLENT VACUUM EXCELLENT VISCOUS FLUIDS EXCELLENT STERILE FLUIDS NO	—————	ACIDS GOOD ALKALIES GOOD ORGANIC SOLVENTS NO PRESSURE GOOD VACUUM GOOD VISCOUS FLUIDS EXCELLENT STERILE FLUIDS POOR	—————	ACIDS EXCELLENT ALKALIES EXCELLENT ORGANIC SOLVENTS EXCELLENT PRESSURE GOOD VACUUM GOOD VISCOUS FLUIDS GOOD STERILE FLUIDS FAIR
Physical characteristics	Thermoplastic elastomer. Polypropylene-based material with USP mineral oil. Excellent tensile strength. Firm (stiff) material. Opaque, black. Manufactured according to GMP.	—————	Thermoplastic. PVC-based material with plasticizer. Firm (stiff) material. Transparent, clear.	—————	Thermal set rubber. Viton B (67% fluorine) Firm (stiff) material Opaque, black. Manufactured according to GMP.
Temp. range	-60 to 270° F (-59~135° C)	-35 to 165° F (-37~74° C)	-58 to 165° F (-50~74° C)	-94 to 125° F (-70~52° C)	-25 to 400° F (-32~205° C)
Meets classifications	None.	Meets NSF-51 and 3A sanitary standards.	USP Class VI, FDA 21 CFR 175.300	FDA 21 CFR 177.1520, USP 23 Class VI, Manufactured according to GMP.	None.
Cleaning/ Sterilization	Sterilize by autoclave only.	Not recommended.	Sterilize by ETO/autoclave. Coil loosely in nonlinting cloth or paper; autoclave at 250°F(121°C), 15 psi (1kg/cm²), 30 minutes (tubing will appear milky); air dry at max 150°F (66°C) for 2 to 2 ½ hrs until clear.	Ethylene oxide or gamma irradiation.	Sterilization is not recommended.